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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,874

02/24/2004

Haw-Minn Lu

3667

36215 7590 08/22/2007  
HAW-MINN LU  
10733 CALSTON WAY  
SAN DIEGO, CA 92126

EXAMINER

ZHOU, YONG

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

08/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/786,874

Applicant(s)

LU ET AL.

Examiner

Yong Zhou

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 3/27/2006, 3/28/2006.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. Applicant is advised to add a heading DETAILED DESCRIPTION OF THE INVENTION between paragraphs [0200] and [0201].

### ***Claim Objections***

3. Claims 1 and 3 are objected to because of the following informalities:

Art Unit: 2609

**For claim 1**, there is a period (.) at the end of step e. Claim(s) must be in one sentence only. In addition, claim 1, step k recites "connection the selected port to the corresponding port". Examiner believes that "connection" is referring to "connecting".

**For claim 3**, applicant is advised to fully spell out the acronym RBCCG at the first occurrence of the acronym in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 1** recites "internal connections are coupled to two of the internal connections" on line 4. Examiner believes that "two of internal connections" are referring to "two of internal ports".

**Claim 2** recites "said new hardware comprises a plurality of new external ports" on line 1. There is insufficient antecedent basis for this limitation in the claim because claim 1 refers to "new hardware comprising a plurality of *internal* ports" in step b.

**Claim 18** recites "the plurality of communications links connect the router ports in a pre-determined manner is selected" on line 1. It is unclear what "is selected".

Appropriate correction is required.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1 and 2 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 (applied below) of U.S. Patent No. 7,123,612 (simply "7,123,612" hereinafter). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following.

**For claim 1** of the instant application, claims 1-3 of 7,123,612 disclose a method of upgrading a multistage scalable switching network, comprising:

a) providing a post-reconfiguration architecture comprising a plurality of stages of switching elements (col. 19, lines 39-42);

Art Unit: 2609

b) adding new hardware comprising a plurality of internal ports as defined by the post reconfiguration architecture (col. 19, lines 43-45);

c) assigning to each internal port a corresponding port defined by the post-reconfiguration architecture (col. 19, lines 39-41);

d) selecting an open port of the plurality of internal ports that is not coupled to a connection (col. 20, lines 1-3);

e) breaking (disconnecting, col. 20, line 8) a first connection coupled to the corresponding port assigned to the open port, if the corresponding port assigned to the open port is coupled to said first connection (col. 20, lines 8-9);

f) connecting the open port to the corresponding port assigned to the open port by coupling a second connection to the open port and to the corresponding port assigned to the open port (col. 20, lines 11-12);

g) repeating steps (d), (e) and (f) until each of the plurality of internal ports is coupled to a connection (col. 19, line 53);

h) selecting a selected port of the plurality of internal ports that is not coupled to the corresponding port assigned to said selected port (col. 20, lines 1-3);

i) breaking a second connection coupled to the selected port (col. 20, lines 6-7);

j) breaking (disconnecting, col. 20, line 8) a third connection coupled to the corresponding port assigned to the selected port, if the corresponding port assigned to the selected port is coupled to said third connection (col. 20, lines 8-9);

Art Unit: 2609

k) connection the selected port to the corresponding port assigned to the selected port by coupling a fourth connection to the selected port and to the corresponding port assigned to the selected port (col. 20, lines 11-12); and

l) repeating steps (h), (i), (j), (k) until each port of the plurality of internal ports is connected to the corresponding port assigned to each port (col. 19, line 53).

**For claim 2** of the instant application, claim 4 of 7,123,612 teaches a further step (m) of activating the selected ports (col. 20, line 24).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 3, 4, 7-12, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US Patent No. 5,841,775).

**For claim 3**, Huang teaches a RBCCG network based system comprising:  
a RBCCG network (col. 2, lines 33-36; the reference admitted in application, [0215], line 2) with a plurality of input and output ports (col. 2, lines 43-45);

a plurality of input means each connected to an RBCCG input port (col. 3, line 38); and

a plurality of output means each connected to an RBCCG output port (col. 3, line 44).

For claims 4, 7-11, Huang teaches all limitations of claim 3.

**For claim 4**, Huang further teaches that the input means can be an Add/Drop Multiplexer (Fig 11).

**For claim 7**, Huang further teaches that the input means is a computer (col. 5, line 34).

**For claim 8**, Huang further teaches that the input means is a data storage unit (col. 11, line 15).

**For claim 9**, Huang further teaches that the input means is a network interface unit (line card, col. 10, line 63).

**For claim 10**, Huang further teaches that the input means is a cpu (processor, Fig. 17).

**For claim 11**, Huang further teaches that the input means is a memory unit (buffer, Fig. 17).

**For claim 12**, Huang teaches a RBCCG network (col. 2, lines 33-36; the reference admitted in application, [0215], line 2) comprising:

a plurality of routers each with a plurality of ports (col. 2, lines 43-45) and

a plurality of communications links connect the router ports in a pre-determined manner (col. 2, lines 38-41).



For claims 17-18, Huang teaches all limitations of claim 12.

**For claim 17**, Huang further inherently teaches that the plurality of communications links connect the router ports in a pre-determined manner via at least one electronically controlled crossbar (col. 14, line 13).

**For claim 18**, Huang further inherently teaches that the plurality of communications links connect the router ports in a pre-determined manner is selected on a link by link basis between a current and new pre-determined manner (col. 4, lines 13-15, and Fig. 6).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5, 6, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Cutaia et al. (US Patent Application No. 2002/0004390).

For claims 5 and 6, Huang teaches all limitations of claim 3.

**For claim 5**, Huang does not specifically teach that the input means is content provider (although Huang does indicate that the scalable switching networks can also be used to switch telecommunications data, see col. 5, lines 36-37).

Cutaia et al. teach that the input means is content provider ([0055], line 19).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huang invention to include content provider as an input means disclosed by Cutaia to switch data from the content provider.

**For claim 6**, Huang does not specifically teach that the input means is a communications provider.

Cutaia et al. teach that the input means is a communications provider ([0025], line 9).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huang invention to include communications provider as an input means disclosed by Cutaia for proper operations and management of the network.

For claims 13 and 14, Huang teaches all limitations of claim 12.

**For claim 13**, Huang does not specifically teach that portions of the plurality of routers are located in different CLEC nodes and at least one of the communications links is part of the CLEC.

Cutaia et al. inherently teaches that switching elements (or routers) can be located in different CLEC nodes, and at least one of the communications links is part of the CLEC (Fig. 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huang invention to place portions of the plurality of routers in different CLEC nodes and at least one of the communications links

Art Unit: 2609

as part of the CLEC disclosed by Cutaia to achieve the predictable results of network configuration.

**For claim 14**, Huang does not specifically teach that portions of the plurality of routers are located in different CLEC nodes and where at least one portion of the plurality of routers corresponds to a column of the RBCCG network.

Cutaia at el. inherently teaches that at least one portion of the plurality of routers corresponds to a column of the RBCCG network (Fig. 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huang invention to include that at least one portion of the plurality of routers corresponds to a column of the RBCCG network disclosed by Cutaia to achieve the predictable results of network configuration.

12. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Stanescu (US Patent No. 6,784,802).

For claims 15-16, Huang teaches all limitations of claim 12.

**For claim 15**, Huang does not specifically teach that the plurality of communications links connect the router ports in a pre-determined manner via a patch panel.

Stanescu teaches that the plurality of communications links connect the router ports in a pre-determined manner via a patch panel (col. 6, line 10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the routers via a patch panel disclosed by

Art Unit: 2609

Stanescu to achieve the predictable results of network connectivity and performance management.

**For claim 16**, Huang does not specifically teach that the plurality of communications links connect the router ports in a pre-determined manner via a patch panel with indicator lights.

Stanescu teaches that the plurality of communications links connect the router ports in a pre-determined manner via a patch panel with indicator lights (col. 6, line 18).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the routers via a patch panel disclosed by Stanescu to achieve the predictable results of network connectivity and performance management.

### ***Conclusion***

13. Any Response to this Office should be **faxed** to (571) 273-8300 or **mailed to**:

Commissioner for Patents,  
P.O. Box 1450  
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**Hand-delivered responses should be brought to**  
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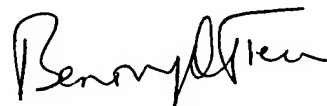
Art Unit: 2609

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Zhou whose telephone number is (571) 270-3451. The examiner can normally be reached on Monday - Friday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YZ

  
BENNY Q. TIEU  
SPE/TRAINER